

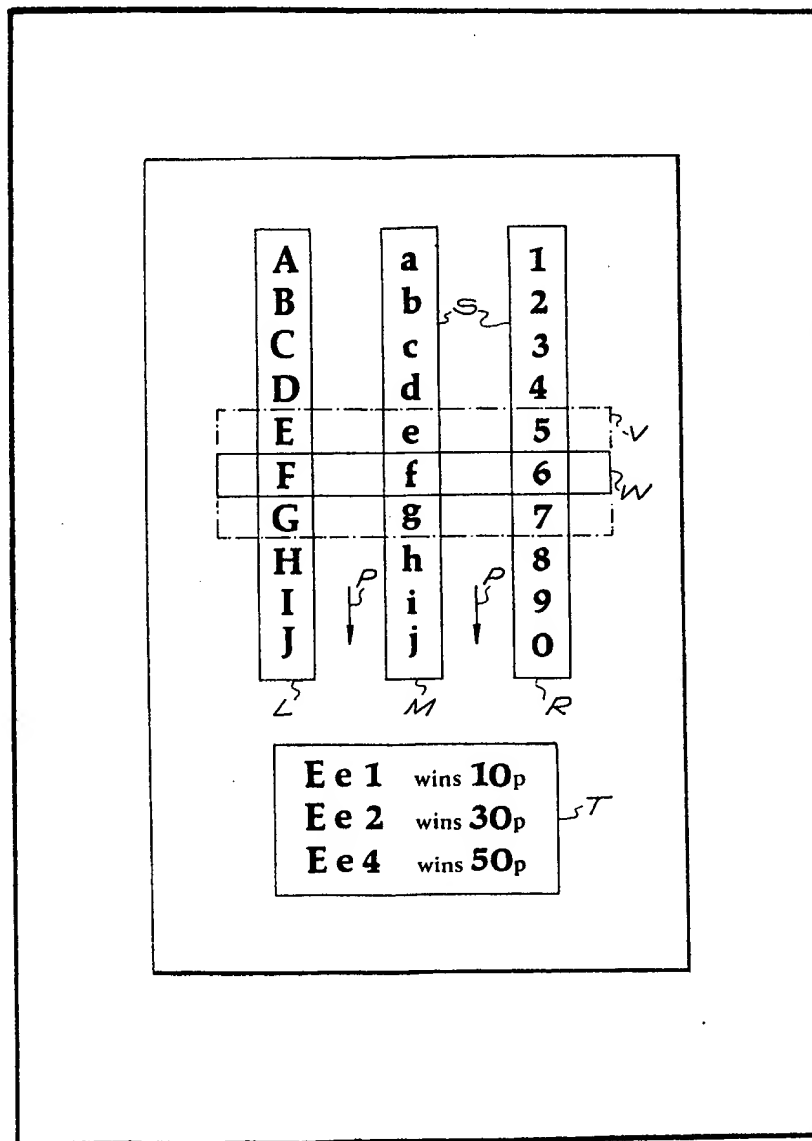
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(54) Coin operated or coin feed machines

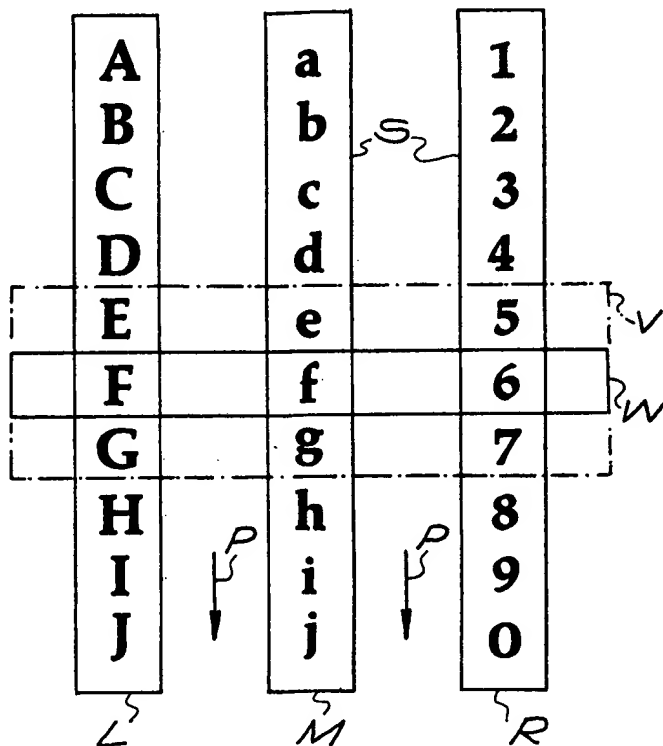
(57) The invention relates to coin operated or coin feed fruit machines, offering a feature commonly referred to as nudging which, though it offers a player a further chance of winning or a chance of an improved win, requires mental and manual dexterity not

possessed by all players for its full utilisation. With the object of offering similar chances to the less skilled, the invention provides a feature whereby, after the reels have spun and stopped in normal play, at least one of the reels is automatically re-spun at least once, the or the last re-spin being followed by the reel's automatically undergoing a number of indexing operations.



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E e 1	wins 10p
E e 2	wins 30p
E e 4	wins 50p

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SPECIFICATION

Coin operated or coin feed machine

The invention relates to a coin operated or coin feed gaming or amusement with prizes machine of the kind which, after it has been operated during normal play by a player, displays to the player a combination of symbols, each at a predetermined position and each being one of a predetermined series capable of being displayed at that position, and in which a payout mechanism is rendered operable or a prize is awarded or indicated if the combination displayed is a winning combination.

Of the machines of the kind indicated above some hereinafter referred to as machine of the type described, are provided with an adjustment mechanism, the operation of which causes one of the symbols at said predetermined position to be replaced by another symbol of the series which other symbol was visible to the player before operation of the mechanism, said other symbol contributing to a winning combination.

Machines of the type described are exemplified by, but not confined to, the so-called fruit machine in which each series of symbols is arranged about the edge of a reel or drum and the operation of the machine during normal play involves the rotation or spinning of the reels or drums, during which rotation the symbols at their edges may or may not be distinguishable by the player, and their subsequent stopping with a randomly determined symbol of each drum visible on a so-called "winning line".

The adjustment feature mentioned above, when applied to fruit machines, is commonly known as a "nudge" or advance mechanism and the use of this involves the indexing of a reel, which has previously been spun and stopped at a randomly determined symbol during normal play, by a predetermined degree of arc so that the said symbol is replaced by the next or another (including previous) symbol in the series which was visible to the player before making use of the adjustment mechanism.

It is also known to provide fruit machines with a "re-spin" feature whereby a reel, after rotating and stopping during normal play, may be rotated again and subsequently stopped with a randomly determined symbol on the winning line.

The invention relates, as already mentioned, not only to fruit machines, but also to machines of the type described wherein by a process equivalent to rotation or respin a randomly determined symbol of the series of symbols becomes visible to the player at the predetermined position, and by a process equivalent to indexing a symbol at the predetermined position may be replaced by another, a predetermined number of symbols along the series. Thus, for example, the symbols may be displayed by projection or illumination (including illumination on a cathode ray tube or by excitement of liquid crystals), the series of symbols around a reel may be replaced by a series

of symbols on a film capable of being projected or a series of signals on a tape or on or in any other form of memory, the signals being capable of being converted to symbols visible to the player, and in the following description and any claims, the terms "spin", "index" and "reel" are to be understood as including any such equivalents.

Although the adjustment feature referred to above offers a player a further chance of winning or a chance of an improved win, its full utilisation requires mental and manual dexterity not possessed by all players, and the object of the present invention is to offer similar chances to the less skilled.

According to the invention there is provided in a machine of the type described, as an additional feature, means whereby, after the reels have spun and stopped in normal play, at least one of the reels is automatically re-spun at least once, the or the last re-spin being followed by the reel's automatically undergoing a number of indexing operations, which number preferably reduces as the number of re-spins increases, whereby a symbol is brought to the said position predetermined for the reel and contributes to a winning combination.

The feature may be made available only when at least one indexing or respinning operation is available, and the number of indexing operations available may be predetermined, possibly on a random basis. The number of re-spins available is preferably related to the number of indexing operations available, and each re-spin may reduce the number of subsequent automatic indexing operations by one or two.

The feature, which may be available at random, may be brought into play without any action by the player but the machine may instead include a mechanism, operable by the player, which brings the feature into play. The feature may be made available only when the player has previously conducted at least one manual indexing or respinning operation. Moreover, the feature may be made available when there is already a winning combination on the winning line but the combination is capable of enhancement and incapable of being diminished.

Embodiments of the invention will now be described by way of example and with reference to the accompanying drawings, of which the single figure shows, schematically, a three-reel fruit machine, the symbol strips S being shown linearly for the sake of simplicity.

For further simplicity the symbols, which are commonly in practice representations of fruit, are replaced in the left hand reel L by capital letters, in the middle reel M by lower case letters and in the right hand reel R by numerals. Further, though in practice a reel may have 20 symbols about its edge and some of the symbols may be repeated, for the sake of simplicity the strips shown have each only 10 symbols, none being repeated.

As shown in the figure the symbols Ff6 lie upon a winning line W whilst these symbols and

also E, G, e, g, 5, 7, are visible to the player through a window V.

The reels move downwardly as shown by arrow P and, as it is to be understood that in reality the symbols are about the circumference of rotating reels, the symbols A, a 1 will be followed by J, j 0 respectively. In practice each reel rotates during normal play through a different degree of arc, which may be more than 360°, before stopping.

By way of example only let it be supposed that after normal play on the machine the symbols lying on the winning line are respectively F, g 1. As shown in the tabel T of winning combinations F, g, 1 is not a winning combination, but E, e, 1 represents a moderate win. Suppose further that the machine indicates at this time that the feature of the invention is available and that seven adjustment operations, each giving an indexing step of one symbol, are provided. Then the player can index the reel L once to bring symbol E onto the winning line and reel M twice to bring symbol e onto the winning line, and the player can claim the moderate win.

The invention envisages that at this point the machine, instead of effecting a payout, will automatically begin to operate on the right hand reel R in an endeavour to enhance the win, for example by as shown in the table T.

Of the seven adjustment operations originally available three have been used up in indexing the left hand reel and four are left. If a symbol on the right hand reel which would contribute to a more valuable winning combination than that in view of the player at this moment were within four symbols of symbol 1 in the direction of movement of the reel then by the apparatus of the invention the right hand reel would automatically index by the necessary number of steps so that the player would be awarded a or the higher prize.

In the example being followed, however, the necessary symbols (2, 4) are out of reach unless, and this is a possible modification within the scope of the invention, the reel is capable of being indexed in the opposite direction to its normal spinning direction. Since the reel cannot reach a position giving a superior result by indexing, the reel is caused automatically to re-spin. The re-spinning "uses up" or "costs" one of the remaining adjustment operation units but nevertheless gives the player an additional chance of a win if after re-spin the reel R stops or within three symbols of either 2 or 4 in the direction of rotation of the reel.

Following the example further and supposing that after the re-spin the reel stops with 8 at the winning line, this is not within the reach of three indexing steps and the reel therefore re-spins again. The further re-spin "costs" a further unit leaving the possibility of only two indexing steps. Thus if after the second re-spin the reel stops with 0 on the winning line, neither 2 nor 4 is within two symbols of the 0 with the reel rotating downwardly as shown in the figure, and the

mechanism therefore causes a third re-spin to be effected. The number of subsequent indexing steps available is again reduced by one which means that after the third re-spin it must stop with 5, 4, 3 or 2 on the winning line for the enhanced combination to be displayed either directly or by the single indexing step remaining. Thus, if after the third re-spin the reel stops at 5 it would index to 4 and pay out 50p; if it stopped at 4 it would pay out 50p directly; if it stopped at 3 it would index to 2 and pay out 30p and if it stopped at 2 it would pay out 30p directly.

The invention is capable of several variations in addition to those already mentioned. For example, the feature may be available on any one or more of the reels, the reel may be indexed in one or either direction, the "cost" of each re-spin may be fixed at one, two or more units or may vary. The feature may be available irrespective of whether the player has first manually indexed or re-spun a reel. The feature may be chosen as an alternative to claiming a prize already indicated.

Claims (Filed 15.9.82)

1. A machine of the type described wherein, as an additional feature, means are provided whereby, after the reels have spun and stopped in normal play, at least one of the reels is automatically re-spun at least once, the or the last re-spin being followed by the reel's automatically undergoing at least one indexing operation, whereby a symbol is brought to the said position predetermined for the reel and contributes to a winning combination.

2. A machine as claimed in Claim 1 wherein the feature is available at random.

3. A machine as claimed in Claim 1 or Claim 2 wherein the feature is brought into play without any action by the player.

4. A machine as claimed in Claim 1 or Claim 2 wherein the the machine includes a mechanism, operable by the player, which brings the feature into play.

5. A machine as claimed in any previous Claim wherein the feature is made available only when the player has previously conducted at least one manual indexing or respinning operation.

6. A machine as claimed in any previous Claim wherein the feature is made available when there is already a winning combination on the winning line but the combination is capable of enhancement.

7. A machine as claimed in any previous Claim wherein the combination is incapable of being diminished.

8. A machine as claimed in any previous Claim wherein the number of indexing operations available is predetermined.

9. A machine as claimed in Claim 8 wherein the number of indexing operations available is predetermined on a random basis.

10. A machine as claimed in any preceding Claim wherein the number of indexing operations reduces as the number of re-spins increases.

11. A machine as claimed in Claim 10 wherein each re-spin reduces the number of subsequent automatic indexing operations by one or two.

12. A machine as claimed in any previous
5 Claim wherein the number of re-spins available is

related to the number of indexing operations available.

13. A machine of the type described substantially as described with reference to the
10 drawings.